



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Passing project

### Course

Field of study

Management and production engineering

Area of study (specialization)

Quality Management

Level of study

Second-cycle studies

Form of study

full-time

Year/Semester

2/3

Profile of study

general academic

Course offered in

polish

Requirements

elective

### Number of hours

Lecture

Laboratory classes

Other (e.g. online)

Tutorials

Projects/seminars

30

### Number of credit points

5

### Lecturers

Responsible for the course/lecturer:

PhD Eng. Łukasz Grudzień

Responsible for the course/lecturer:

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Faculty of Mechanical Engineering

Piotrowo 3 Str., 60-965 Poznań, room 304

### Prerequisites

The student knows the relationship between engineering and managerial activities in a production company. The student is able to design a quality management system in a production company. He/she is able to work in a team, recognizing the necessity of continuous education.

### Course objective

The aim of this course is to link the knowledge and skills acquired by students in the course of their studies to the implementation of a process and risk-based approach in the organization.

### Course-related learning outcomes

Knowledge



The student knows the benefits of implementing a process and risk-based approach in a manufacturing company.

The student knows methods of describing processes and assessing the risk connected with them.

#### Skills

The student is able to design a quality management system (especially in a production company) taking into account effective process and risk management.

The student is able to map processes in a production company, design effectiveness and efficiency assessment indicators and to estimate risk in the process.

#### Social competences

The student is creative, responsible for the decisions made, he or she is able to determine the priorities of the actions performed.

The student is able to cooperate with the team.

#### **Methods for verifying learning outcomes and assessment criteria**

Learning outcomes presented above are verified as follows:

Project: A credit is given on the basis of the student's paper, work defence and work discussion.

#### **Programme content**

Passing project is of a transversal nature, combining the knowledge and skills of the Students, acquired in the course of their education to date.

Project:

The design of assumptions for a quality management system of a specific production company.

Preparation of an organizational chart, process maps, competence matrix and process connections.

Development of process charts including, among other things, a proposal of indicators to assess their effectiveness and efficiency. Performing risk analysis for individual processes. Presenting the possibilities of reducing the risk of business venture failure.

#### **Teaching methods**

Project: solving practical problems, searching for sources, teamwork, discussion.

#### **Bibliography**

Basic

Standard EN-ISO 9001:2015 Quality management system. Requirements, ISO 2015

Standard EN-ISO 31000:2018 Risk management. Guidelines, ISO 2018

Additional

Hamrol, A.: Management and quality engineering, PWN, Warsaw 2018



Hamrol A.: Strategies and practices of efficient operation, PWN, Warsaw 2018

Kaczmarek T.T.: Risk management. Interdisciplinary approach, Difin, Warsaw 2010

### Breakdown of average student's workload

	Hours	ECTS
Total workload	125	5,0
Classes requiring direct contact with the teacher	75	3,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) <sup>1</sup>	50	2,0

<sup>1</sup> delete or add other activities as appropriate